



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229

December 6, 2018

Policy Analysis Branch

SUBJECT: Permit Application No. SWG-2013-00147

Freeport LNG Development, L.P.
Ms. Erin Piper
333 Clay RD, Suite 5050
Houston, Texas 77002

Dear Ms. Piper:

The Corps of Engineers (Corps) published a notice on May 23, 2018 to advise the public of your proposed activity. In response, we received the enclosed letters from the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, Texas Commission on Environmental Quality, Texas Parks and Wildlife Department, and numerous public organizations.

In addition, the Corps has the following questions/concerns regarding the proposed projects purpose and need, alternatives analysis, baseline assessment and evaluation of mitigation, and endangered species evaluation:

Purpose and Need

The Corps has evaluated the purpose and need statement provided by FLNG and concluded, in accordance with 40 CFR Section 1502.13 Section 404(b)(1) Guidelines and 33 CFR, Part 325, Appendix B, 9b(4) that the basic project purpose is, "to authorize a location for the placement of maintenance dredged material". Based on this basic purpose, the proposed project does not require access or proximity to or sighting within the special aquatic (i.e. is not "water dependent"). Therefore, it is presumed that practicable alternatives that do not involve special aquatic sites are available, unless clearly demonstrated otherwise, and that these alternatives have less adverse impact on the aquatic ecosystem

In addition to the basic purpose, the Corps has also evaluated FLNG's purpose and need statement and concluded that the appropriate overall purpose is, "to provide authorized placement location(s) within 5 miles of the dredged site capable of stockpiling an estimated 500,000 cubic yards (cy) of dredged material annually to maintain the authorized depths in the existing Quintana Island Terminal Berth for 15 years." It is this overall project purpose that will be used in the alternative site identification process and for the evaluation of identified practicable alternative sites under the Section 404(b)(1) Guidelines.

Alternatives Analysis

FLNG has identified numerous alternatives that have the potential to address the need to place 500,000 cy of maintenance dredge material annually and evaluated these alternatives with 10 screening criteria. Based on their analysis, FLNG identified their preferred Private DMPA Site C alternative, which will result in the loss of 171 acres of wetlands, as the Least Environmentally Damaging Practicable Alternative.

A similar alternatives analysis, including many of the same alternative sites, was documented in the Corps' February 10, 2018 Environmental Assessment and Statement of Findings (EA) concluding that the Freeport Maintenance Offshore Dredge Material Disposal Site (ODMDS) was the preferred alternative. During the Corps evaluation of FLNG's use of the ODMDS, it was concluded that FLNG's use of the ODMDS may affect the federal project if the dredge events were not timed correctly. As a result, FLNG is required to coordinate with the Galveston District's Operation Division prior to their dredge events. To further address this issue, Galveston District's Operation Division and the Environmental Protection Agency announced at the 2018 Galveston District Dredge Workshop, they were modifying the ODMDS to expand and divide the Actual Discharge Site of the ODMDS to de-conflict the federal and private use. It is anticipated this change will occur prior to FLNG's next authorized use of the ODMDS in 2019. Based on this change, the ODMDS alternative now passes screening criteria numbers 7 and 10 which previously eliminated it. The remaining criteria eliminating the ODMDS from further consideration is number 9. *"Disposal method requires minimal dredging equipment to safely maneuver around incoming and outgoing LNG ships and conduct dredging activities within a very active FLNG Berth"*. This screening criteria, which was not included in the EA authorizing the current use of the ODMDS, seems to identify additional safety and navigation issues that may not have been fully documented or disclosed in our previous EA. Therefore, FLNG will need to provide additional information on this screening criteria, specifically how the concerns were addressed with the existing ODMDS permit.

FLNG's alternatives analysis also included 6 beneficial use (BU) sites which were similarly considered in the previous EA. In that analysis, these BU sites were evaluated both individually and combined for their practicability as placement sites for a maintenance dredge event removing up to 1.75 million cubic yards. None of the sites, individually or combined, were determined to be practicable alternatives due to lack of capacity. In FLNG's current request, FLNG has revisited the sites and concluded that they do not meet screening criteria numbers 2, 4, and 5. This conclusion seems to assume that the goal of a long-term, dedicated site with sufficient capacity for 15 years will only be practicable if it is a single location. Similar to our previous analysis, these BU sites can be combined and considered as one alternative.

Baseline Aquatic Resource Assessment and Mitigation

FLNG has proposed to mitigate for the proposed impacts to 174.7 acres of palustrine emergent, 19.1 acres of palustrine scrub/shrub wetlands and 2.7 acres of open water along the Brazos River by restoring 116 acres and enhancing 56.6 acres of palustrine emergent prairie wetlands along Bastrop Bayou. The determination that the unavoidable loss of 196 acres can fully offset in acres 174.7 acres (a 1:0.88 ratio) is based on the Corps' Riverine Herbaceous/Shrub HGM Interim model (iHGM). This functional assessment may not be the appropriate methodology.

Based on information included with the wetland delineation, including plant communities and soil information, as well as observations made by state and federal agencies during their site visit; there is strong evidence that the site may be estuarine. If so, the mitigation site would be out-of-kind and the use of the iHGM would not be appropriate. In order to establish the appropriate baseline for our evaluation of the proposed impacts as well as all appropriate mitigation measures, FLNG needs to provide a detailed analysis of the hydrologic influences and salinities of the site.

If the site is determined to be estuarine, the Corps requests FLNG investigate the BU sites as potential compensatory mitigation sites in addition to alternatives to the Private DMPA Site C.

Endangered Species Act

The Corps agrees with USFWS that the information provided does not fully support FLNG's conclusions on threatened and endangered species use of the preferred alternative or the BU alternatives. In particular Whooping Cranes, Piping Plover and Red Knots may all potentially use parts of these sites during the winter months. It would be appropriate for FLNG to work with the Corps and USFWS to develop an appropriate survey protocol to determine which sites may require additional consultation pursuant to the Endangered Species Act.

Conclusion

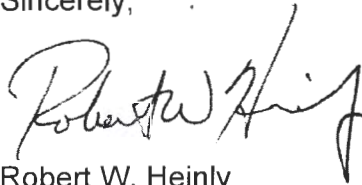
The concerns raised in the letters, as well as those raised by the Corps, must be given full consideration before we can make a final decision on your application. We need your information to address the concerns/issues raised over the proposed project. You may submit additional information or revise your plans to help resolve the issues. You may also rebut the issues made or request a decision based on the existing record.

Please reference our file number in any future correspondence pertaining to this project. If you do not submit the information requested, in its entirety, within 30 days

from the date of this letter, we will assume that you no longer wish to pursue this permit and your application will be withdrawn. We are ready to assist you in whatever way possible. If you have any questions, please contact Mr. Jayson Hudson at 409-766-3108 or by electronic mail at jayson.m.hudson@usace.army.mil if you prefer.

To assist us in improving our service to you, please complete the survey found at: http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0

Sincerely,

A handwritten signature in black ink, appearing to read "Robert W. Heinly". The signature is fluid and cursive, with the first name "Robert" being more prominent.

Robert W. Heinly
Chief, Policy Analysis Branch

cc w/Encl.

Texas Commission on Environmental Quality, Water Quality Division, MC-150, P.O.
Box 13087, Austin, Texas 78711-3087

AGENT

cc (by electronic mail)
Environmental Protection Agency
U.S. Fish and Wildlife Service
Texas Parks and Wildlife Department